ABSTRACT

The present invention relates to enzyme preparations consisting essentially of an enzyme which has cellulytic activity and comprises a first amino acid sequence having the following sequence

Thr Arg Xaa Xaa Asp Cys Cys Xaa Xaa Xaa Cys Xaa Trp Xaa (SEQ ID NO: 79)
1 2 3 4 5 6 7 8 9 10 11 12 13 14

and a second amino acid sequence having the following sequence

Trp Cys Cys Xaa Cys (SEQ ID NO: 80)
1 2 3 4 5

wherein, at position 3 of the first sequence, the amino acid is Trp, Tyr or Phe; at position 4 of the first sequence, the amino acid is Trp, Tyr or Phe; at position 8 of the first sequence, the amino acid is Arg, Lys or His; at positions 9, 10, 12 and 14, respectively, of the first sequence, and at position 4 of the second sequence, the amino acid is any of the 20 naturally occurring amino acid residues with the provisos that, in the first amino acid sequence, (i) when the amino residue at position 12 is Ser, then the amino acid residue at position 14 is not Ser, and (ii) when the amino residue at position 12 is Gly, then the amino acid residue at position 14 is not Ala, performs very good in industrial applications such as laundry compositions, for biopolishing of newly manufactured textiles, for providing an abraded look of cellulosic fabric or garment, and for treatment of paper pulp. Further, the invention relates to DNA constructs encoding such enzymes, a method for providing a gene encoding for such enzymes, a method of producing the enzymes, enzyme preparations containing such enzymes, and the use of these enzymes for a number of industrial applications.